Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of a Proposal to Create a National Emergency Administrative Radio Service (NEARS)))))) () RM No))
By W. Lee McVey	,)))
To: The Commission))))

PETITION FOR RULEMAKING

As a long time licensee of the Commission in both Amateur and Commercial facets of telecommunications, I offer the following proposal. Its consideration and adoption will require the concurrence of the National Telecommunications and Information Administration (NTIA), Department of Commerce, as it proposes creation of a new radio service in the interest of public health, safety and security.

I. Proposal

 This Petition proposes the creation of a new radio service, the National Emergency

Administrative Radio Service (NEARS), to fulfill, in part, the requirements of the National Security and Emergency Planning and Execution directives at 47CFR§202.3(a) and (b).

- 2. A service called SHARES, the Shared Resources High Frequency Network, was created by NTIA and the Commission to facilitate intercommunication during and following national emergencies at the state and regional level. While the SHARES role is regional and strategic, there is no similar local, area-focused service that exists to meet the demonstrated intercommunication need at the individual unit or responder level.
- 3. The purpose of this service, and the spectrum set aside for it, would be to facilitate

interoperability between military, federal, state and local government public safety and aid officials and individual responders during and immediately following national emergencies. The proposal will require the assignment of a portion, if not all, of the 148 to 150 MHz radio spectrum, now assigned exclusively to the federal government¹, for use by a fleet of state or federal government-authorized flexible,

The segment is now utilized by the Civil Air Patrol (CAP), the Military Affiliate Radio System, NASA, and some military facilities for routine communications. Both the CAP and MARS uses now support the intent and purpose of this Petition as much of their operations involve military and

analog FM two-way radios and associated portable, mobile relay systems to enable extended range operation.

II. Background

- 4. The experience of several severe national emergencies has shown all of us the frail, non-robust nature of modern two-way telecommunications systems. Both wireless and wireline.
- 5. It is common knowledge that during and after massive national-scale catastrophes such as hurricanes, earthquakes, and terrorist acts, normal communication means are often times damaged or destroyed contributing to further-aggravated damage, injury and loss of life. If not completely destroyed, damaged to the extent that they cannot be depended upon or are insufficiently available to those whose responsibilities are to save lives by responding to the injured or those yet in harm's way. And, to those in our military, National Guard, federal agencies, state and local public safety officials, and health and welfare agencies responding to calls for additional assistance.

public safety, health and welfare. MARS is an active participant in the SHARES system. MARS operators are, for the most part, licensed Amateur Radio operators.

- 6. Telecommunications infrastructure is often reduced to merely two-way radio-equipped mobile units of the same fleet capable of talking unit-to-unit. As was the case not only in New Orleans, but in Port Charlotte, Florida, following hurricane Charlie, and following the events of September 11, 2001, in New York City.
- 7. The single-point vulnerability and sequestered nature of so-called state-of-theart trunked

radio mobile-relay systems are common knowledge. The loss of the trunking controller in New Orleans, for example, made their extensive mobile-relay trunked system useless. Port Charlotte's system was severely damaged and unusable as well, following hurricane Charlie. And, in the case of New York City, different systems, different protocols, and sheer numbers of responders made interoperability nearly impossible.

8. Most recently, not only was the New Orleans system itself useless, but incoming units from the military, Coast Guard and a multiplicity of other state, local and federal agencies from other areas could not effectively intercommunicate and interoperate due to the myriad of different radio band and frequency assignments.

To say nothing of those who came with digital protocol feature radios, further complicating the situation. Only a few military units, the Coast Guard and

available amateur radio operators were able to interoperate effectively for this reason, thanks to frequency agility and proximity of assigned spectrum.

- 9. The Commission's proposed new 700MHz public safety allocation is not a solution, either. Due to the massive expense involved with moving agencies to this band, and the propagation, coverage vulnerabilities, and system losses at such high frequencies make the band not desirable to agencies in mountainous or remote terrain, such as exists in some of the Western and Mid-Western states and the Northeast.
- 10. Even if all regional public safety agencies were to agree to relocate to 700MHz, for example, the military, National Guard and the Coast Guard would not be universally equipped with radio equipment that would operate on any frequencies or modes involved as their mobile, base and person-to-person operations are conducted primarily on a portion of the high-band VHF spectrum from 148 to 174MHz using analog, narrow-band FM voice.
- 11. In order to meet this need, both spectrum and mode should be selected that are presently in use somewhat universally or can be easily used with commercial equipment; and, that is close enough to present allocations that other services, including the military, the National Guard and the Coast Guard can select frequencies within such a segment capable of use with their existing equipment.

The 148 to 150MHz spectrum would be ideal for such a purpose, using 5kHz narrow-band, analog FM voice as the mode.

- 12. The 148 to 150MHz band is currently only sparsely used by federal agencies and is within 10 MHz of public safety allocations, the maritime service, and the 144 to 148MHz Amateur Radio Service allocation. Most modern commercial radio equipment, now type-accepted for use under Part 90, is capable of operation from roughly 140MHz to 170MHz without significant internal retuning. In addition, Coast Guard and military units are equipped with radios operating below 160MHz as well, offering direct keyboard frequency-entry-capability in the 148-150MHz segment. Amateur radio operators, by virtue of their adjacent allocation and direct keyboard frequency entry could similarly operate within this segment, if necessary, as they do now on HF frequencies as key participants in the SHARES system and the Military Affiliate Radio System (MARS). Most existing VHF MARS operations are already within the 148 to 150MHz segment.
- 13. Beside the need to designate an allocation and perhaps shift existing users somewhat, depending on the amount of spectrum needed for NEARS, a change to existing regulations would be desirable to permit type-acceptance of keyboard-frequency-programmable radios for optimum flexibility for NEARS users.

- 14. There exist several relatively inexpensive radios manufactured by Motorola, Inc., for export use, that already incorporate keyboard programmability. The GP-68, GP-338 and JT-1000 models are three handheld radio examples that come to mind. There are other similar products made by others for use by our military and internationally that also possess direct keyboard frequency entry capability.
- 15. Creation of NEARS would not require wholesale retooling or a lengthy and complicated coordination process, since not many channels would be needed for such a service. Frequencies or a frequency band incorporating sufficient separation for mobile relays could be interspersed between existing users. Selected so as to avoid NTIA's already-coordinated uses by CAP, NASA, and MARS, for example.
- 16. The cost to the government would be minimized by virtue of the compatibility of most, if not all government service radio equipment that would be involved in emergency operations, including the military. State and local public safety entities may need to purchase additional, frequency-agile equipment, or could easily modify existing high band VHF equipment to operate on all of the frequencies selected for interoperability in this band.
- 17. Creation of this service would fulfill the need for immediate affected area interoperability of communications following crises. Even though regulations do permit use of unassigned service frequencies in emergencies, the lack of physical

equipment on hand to enable such operation has left emergency responders without the needed means to do so.

18. While it was laudable, perhaps even Herculean, for the Commission Staff to have relocated temporarily near New Orleans in order to grant Special Temporary Authority to operate mobile and relay stations not licensed for the area in the aftermath of Katrina, such authority didn't provide the additional radio hardware with which to intercommunicate with other agencies. This proposal, if adopted, would permit the advance frequency coordination, licensure and availability of the equipment to be used for such purposes so that future responses to national emergencies could be much more effective.

19. This matter is urgent, and deserves the immediate attention of the Commission as its consideration and implementation may lessen adverse consequences following future national emergencies.

I wish to thank the Commission in advance for the opportunity to submit this Petition and await its response.

Respectfully Submitted,

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